

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An information processing apparatus as a host computer for ~~forming-generating~~ print data including printer control commands to be transmitted to a printing apparatus, comprising:

a spooler which is adapted to convert drawing data ~~formed-issued~~ by an application to be printed into ~~data in an intermediate code format~~ data and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including layout information specified via a user interface of a printer driver, wherein said spooler is configured to spool a plurality of the intermediate code format data of a plurality of print jobs;

a processor which is adapted to ~~form one composed job by composing~~ compose the plurality of the intermediate code format data of the plurality of print jobs spooled by said spooler and to generate composed print data of one composed job; and

a previewer which is adapted to obtain layout information of the plurality of print jobs composed by said processor and to ~~output drawing data perform to a~~ simultaneous display of a preview image of the plurality of the intermediate code format data before said processor generates the composed print data of the composed job, the preview image being edited in accordance with the respective layout information ~~so as to control a display screen to display of a preview of the composed job~~,

wherein ~~when controlling display of the preview image indicates of the composed job, said previewer controls the display screen to, display the preview indicating~~ that the respective page layout of the plurality of print jobs is maintained.

2. (Previously Presented) An apparatus according to claim 1, further comprising a setting editor for displaying a user interface to edit a print setting of the spooled intermediate code format data and to temporarily spool the print setting edited by said user interface in association with the intermediate code format data,

wherein the layout information is included in said print setting.

3. (Original) An apparatus according to claim 2, wherein said user interface can edit the print setting for the composed job.

4. (Cancelled)

5. (Currently Amended) An apparatus according to claim 1, wherein said respective ones of said layout information includes include a layout process in said information processing apparatus and a layout process in said printing apparatus.

6. (Previously Presented) An apparatus according to claim 1, further comprising a print data forming unit for forming the print data to be transmitted to said printing apparatus on the basis of intermediate data format data spooled by said spooler.

7. (Previously Presented) An apparatus according to claim 6, further comprising:

a draw command forming unit for converting the intermediate data format data spooled by said spooler into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

a print command allocating unit for sending a print command received from the application through the drawing unit of the OS to the spooler and sending the print command received from said draw command forming unit through the drawing unit of the OS to said print data forming unit.

8. (Original) An apparatus according to claim 7, wherein the draw command is a GDI function, the print command is a DDI function, and the print data is a printer language.

9. (Currently Amended) An information processing method of forming an information processing apparatus as a host computer for generating print data including printer control commands to be transmitted to a printing apparatus, comprising:

a spooling step to convert data formed by an application to be printed into data in an intermediate code format and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including respective layout information specified via a user interface of a

printer driver, wherein said spooling step is repeatable so as to spool a plurality of print jobs;

a processing step of forming one composed job by composing the plurality of print jobs spooled in said spooling step; and

a preview step of obtaining respective layout information of the plurality of print jobs composed in said processing step and to output drawing data edited in accordance with the respective layout information so as to control a display screen to display of a preview of the composed job,

wherein said preview step controls the display screen to display the preview indicating that the respective page layout of the plurality of print jobs is maintained.

10. (Previously Presented) A method according to claim 9, further comprising a setting editing step of displaying a user interface to edit a print setting of the spooled intermediate code format data and to temporarily spool the print setting edited by the user interface in association with the intermediate code format data,

wherein the layout information is included in said print setting.

11. (Original) A method according to claim 10, wherein the user interface can edit the print setting for the composed job.

12. (Cancelled)

13. (Currently Amended) A method according to claim 9, wherein the respective ones of said layout information ~~includes~~ include a layout process in said information processing method and a layout process in said printing apparatus.

14. (Previously Presented) A method according to claim 9, further comprising a print data forming step of forming the print data to be transmitted to said printing apparatus on the basis of the intermediate code format data spooled in the spooling step.

15. (Previously Presented) A method according to claim 14, further comprising:

a draw command forming step of converting the spooled intermediate code format data into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

a print command allocating step of sending a print command received from the application through the drawing unit of the OS in said spooling step and sending the print command received from said draw command forming step through the drawing unit of the OS to said print data forming step.

16. (Original) A method according to claim 15, wherein the draw command is a GDI function, the print command is a DDI function, and the print data is a printer language.

17. (Currently Amended) A computer-readable storage medium which stores a computer-executable program for an information processing apparatus used as a host computer for forming-generating print data including printer control commands to be transmitted to a printing apparatus, wherein the program comprises:

a spooling step to convert data formed by an application to be printed into data in an intermediate code format and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including layout information specified via a user interface of a printer driver, wherein the spooling step is repeatable so as to spool a plurality of print jobs;

a processing step to form one composed job by composing the plurality of print jobs spooled in said spooling step; and

a preview step to obtain respective layout information of the plurality of print jobs composed in said processing step and to output drawing data edited in accordance with the respective layout information so as to control a display screen to display of a preview of the composed job,

wherein said preview step controls the display screen to display the preview indicating that the respective page layout of the plurality of print jobs is maintained.

18. (Previously Presented) A computer-readable medium according to claim 17, wherein the program further comprises a setting editing step to display a user interface to edit a print setting of the spooled intermediate code format data and to

temporarily spool the print setting edited by the user interface in association with the intermediate code format data,

and wherein the layout information is included in the print setting.

19. (Previously Presented) A computer-readable medium according to claim 18, wherein the user interface can edit the print setting for the composed job.

20. (Cancelled)

21. (Currently Amended) A computer-readable medium according to claim 17, wherein the respective ones of said layout information ~~includes~~ include a layout process in said information processing apparatus and a layout process in said printing apparatus.

22. (Previously Presented) A computer-readable medium according to claim 17, wherein the program further comprises a print data forming step to form the print data to be transmitted to said printing apparatus on the basis of the spooled intermediate code format data.

23. (Previously Presented) A computer-readable medium according to claim 22, wherein the program further comprises:

a draw command forming step to convert the spooled intermediate code format data into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

a print command allocating a step to send print command received from the application through the drawing unit of the OS in said spooling step and to send the print command received from said draw command forming program code through the drawing unit of the OS to said print data forming step.

24. (Previously Presented) A computer-readable medium according to claim 23, wherein the draw command is a GDI function, the print command is a DDI function, and the print data is a printer language.

25. (Currently Amended) A computer-executable program stored on a computer-readable memory medium for an information processing apparatus as a host computer for forming generating print data including printer control commands to be transmitted to a printing apparatus, comprising:

spooling code for a spooling step to convert data formed by an application to be printed into data in an intermediate code format and to temporarily spool the intermediate code format data and print setting information as one print job in a spool file, the print setting information including layout information specified via a user interface of a printer driver, wherein the spooling code is executable repeatedly so as to spool a plurality of print jobs;



processing code for a processing step one composed job by composing the plurality of spooled print jobs; and

preview code for a preview step to obtain respective layout information of the plurality of composed print jobs and to output drawing data edited in accordance with the respective layout information so as to control a display screen to display of a preview of the composed job,

wherein said preview code controls the display screen to display the preview indicating that the respective page layout of the plurality of print jobs is maintained.

26. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 25, further comprising editing code for a setting editing step to display a user interface to edit a print setting of the spooled intermediate code format data and to temporarily spool the print setting edited by the user interface in association with the intermediate code format data,

wherein the layout information is included in the print setting.

27. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 26, wherein the user interface can edit the print setting for the composed job.

28. (Cancelled)

29. (Currently Amended) A computer-executable program stored on a computer-readable memory medium according to claim 25, wherein the respective ones of said layout information ~~includes~~ include a layout process in said information processing apparatus and a layout process in said printing apparatus.

30. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 25, further comprising print-data forming code for a print data forming step to form the print data to be transmitted to said printing apparatus on the basis of the spooled intermediate code format data.

31. (Previously Presented) A computer-executable program stored on a computer-readable memory medium according to claim 30, further comprising:

draw-command code for a draw command forming step to convert the spooled intermediate code format data into a draw command which can be interpreted by a drawing unit of an operating system ("OS"); and

print-command allocating code for a print command allocating step to send a print command received from the application through the drawing unit of the OS to said spooling program code and to send the print command received from said draw-command forming code through the drawing unit of the OS to said print-data forming code.

32. (Currently Amended) A computer-executable program stored on a computer-readable memory medium according to claim 31, wherein the draw command is

a GDI function, the print command is a DDI function, and the print data is a printer language.

33. (Withdrawn) An information processing apparatus for forming print data to be transmitted to a printing apparatus, comprising:

designation means for designating a plurality of document data stored in a memory so as to print the plurality of document data as one composed print job at the printing apparatus, each of the plurality of document data being associated with layout information that indicates a number of logical pages to be printed on one physical page;

composition means for forming the composed print job by composing the plurality of document data designated by said designation means; and

preview control means for obtaining respective layout information of the plurality of document data designated by said designation means and outputting drawing data edited in accordance with the respective layout information so as to control display of a preview of the composed print job,

wherein when controlling display of the preview of the composed print job, said preview control means controls display of the preview indicating that the respective page layout of the plurality of document data is maintained.

34. (Withdrawn) An information processing apparatus according to Claim 33, wherein the layout information includes at least one of first information processed upon printing at said information processing apparatus and second information processed upon

printing at the printing apparatus, and wherein when the layout information includes the second information, said preview control means outputs the drawing data edited in accordance with the second information.

35. (Withdrawn) An information processing apparatus according to Claim 33, wherein when the plurality of document data designated by said designation means have different layout information, said preview control means controls display of the preview such that the respective layout information of the plurality of document data are made effective and the plurality of data having respective different layout information are displayed as one composed job data.

36. (Withdrawn) An information processing method which forms print data to be transmitted to a printing apparatus, comprising:

a designating step which designates a plurality of document data stored in a memory so as to print the plurality of document data as one composed print job at the printing apparatus, each of the plurality of document data being associated with layout information that indicates a number of logical pages to be printed on one physical page;

a composing step which forms the composed print job by composing the plurality of document data designated in said designating step; and

a previewing step which obtains respective layout information of the plurality of document data designated in said designating step and which outputs drawing

data edited in accordance with the respective layout information so as to control display of a preview of the composed print job,

wherein when controlling display of the preview of the composed print job, said previewing step controls display of the preview indicating that the respective page layout of the plurality of document data is maintained.

37. (Withdrawn) An information processing method according to Claim 36, wherein the layout information includes at least one of first information processed upon printing at said information processing apparatus and second information processed upon printing at the printing apparatus, and wherein when the layout information includes the second information, said previewing step outputs the drawing data edited in accordance with the second information.

38. (Withdrawn) An information processing method according to Claim 36, wherein when the plurality of document data designated in said designating step have different layout information, said previewing step controls display of the preview such that the respective layout information of the plurality of document data are made effective and the plurality of data having respective different layout information are displayed as one composed job data.

39. (Withdrawn) A computer-readable storage medium which stores a computer-executable program for an information apparatus for forming print data to be transmitted to a printing apparatus, wherein said program comprises:

a designating step which designates a plurality of document data stored in a memory so as to print the plurality of document data as one composed print job at the printing apparatus, each of the plurality of document data being associated with layout information that indicates a number of logical pages to be printed on one physical page;

a composing step which forms the composed print job by composing the plurality of document data designated in said designating step; and

a previewing step which obtains respective layout information of the plurality of document data designated in said designating step and which outputs drawing data edited in accordance with the respective layout information so as to control display of a preview of the composed print job,

wherein when controlling display of the preview of the composed print job, said previewing step controls display of the preview indicating that the respective page layout of the plurality of document data is maintained.

40. (Withdrawn) A computer-readable storage medium according to Claim 39, wherein the layout information includes at least one of first information processed upon printing at said information processing apparatus and second information processed upon printing at the printing apparatus, and wherein when the layout information includes the

second information, said previewing step outputs the drawing data edited in accordance with the second information.

41. (Withdrawn) A computer-readable storage medium according to Claim 39, wherein when the plurality of document data designated in said designating step have different layout information, said previewing step controls display of the preview such that the respective layout information of the plurality of document data are made effective and the plurality of data having respective different layout information are displayed as one composed job data.

42. (Withdrawn) A computer-executable program stored on a computer-readable memory medium for an information processing apparatus for forming print data to be transmitted to a printing apparatus, comprising:

designating code which designates a plurality of document data stored in a memory so as to print the plurality of document data as one composed print job at the printing apparatus, each of the plurality of document data being associated with layout information that indicates a number of logical pages to be printed on one physical page;

composing code which forms the composed print job by composing the plurality of document data designated by said designating code; and

previewing code which obtains respective layout information of the plurality of document data designated by said designating code and which outputs drawing data edited in accordance with the respective layout information so as to control display of a preview of the composed print job,

wherein when controlling display of the preview of the composed print job, said previewing code controls display of the preview indicating that the respective page layout of the plurality of document data is maintained.

43. (Withdrawn) A computer-executable program according to Claim 42, wherein the layout information includes at least one of first information processed upon printing at said information processing apparatus and second information processed upon printing at the printing apparatus, and wherein when the layout information includes the



second information, said previewing code outputs the drawing data edited in accordance with the second information.

44. (Withdrawn) A computer-executable program according to Claim 36, wherein when the plurality of document data designated by said designating code have different layout information, said previewing code controls display of the preview such that the respective layout information of the plurality of document data are made effective and the plurality of data having respective different layout information are displayed as one composed job data.